

Claims

- [c1] A method of making *Flemingia macrophylla* herbal drug composition with hypoglycemic activity, comprising of collection of *Flemingia macrophylla* root, removing the root cover, drying it in shade under 40° C and grinding it to fine powder, soaking it in water for 12 to 17 hours, allowing to filter and mixing the decoction with 1% gum acacia.
- [c2] A method of making *Careya arborea* herbal drug with complex hyperglycemic and hypoglycemic activity, comprising of collection of *Careya arborea* root, removing the root cover, drying it in shade under 40° C and grinding it to fine powder, soaking it in water for 12 to 17 hours, allowing to filter and mixing the decoction with 1% gum acacia.
- [c3] An improved micro HPLC method for identifying metformin-like compound in the root cover of *Flemingia macrophylla* or *Careya arborea* comprising of a) preparing the standard solution in water , b) preparing the aqueous solution of root cover of *Flemingia macrophylla* or *Careya arborea* by submerging the powdered root cover of *Flemingia macrophylla* or *Careya arborea* in dis-

tilled water for 6 hours, stirring for 30 minutes, followed by filtration and dilution of the filtrate twenty times, c) subjecting the standard solution of stage (a) and aqueous solution of stage (b) to micro HPLC wherein the chromatographic conditions used in the Micro HPLC procedure are as follows: octadecyl silane column of particle size 3 micrometer and inner diameter 5mm; mobile phase of water and methanol (in 50:50 ratio); detection wavelength 220 nm and flow rate adjusted to 0.2 ml / min.

- [c4] The metformin-like compound of claim 3 has pharmacological actions that are similar to synthetic metformin hydrochloride.